

**WHAT IS CLAIMED IS:**

5,6 A, 12 > 1. A printer adapted to be connected to a host computer and to receive data including control commands from the host computer, comprising:

a receive buffer for temporarily storing received data;

5 a data interpreter for interpreting the data in said receive buffer;

control means responsive to said data interpreter for controlling the printer;

state detection means for detecting whether the printer is in a first state in which received data is not printed, or in a second state in which received data is printed; and

10 clearing means for clearing the receive buffer,

characterized in that said clearing means is responsive to said state detection means for clearing said receive buffer when said printer is detected to be in said first state.

2. The printer of claim 1, further comprising:

15 setting means for setting a data handling mode that determines how data are handled when said printer is in said first state; and

reading means for reading said data handling mode when said printer is detected to be in said first state by said state detection means;

20 wherein said clearing means is adapted to clear said receive buffer only when said data handling mode is set to allow clearing of said receive buffer.

3. The printer of claim 2, wherein said setting means is adapted to set said data handling mode in response to a specific control command from said host computer.

4. The printer of claim 1, further comprising data discarding means for discarding data received from said host computer while said printer is in said first state.

5. The printer of claim 4, wherein said data discarding means is adapted to discard data only when said data handling mode is set to allow discarding the data received from said host computer.

6. The printer of claim 1, further comprising a print buffer for storing expanded print data, wherein said clearing means is adapted to clear both said receive buffer and said print buffer.

7. The printer of claim 1 wherein said first state is an off-line state in which said data interpreter does not interpret received data, and said second state is an on-line state in which said data interpreter interprets received data.

8. A method of controlling a printer, comprising the steps of:

(a) detecting whether said printer is in a first state in which received data is not printed or in a second state in which received data is printed; and

(b) clearing a receive buffer for temporarily storing received data when said printer is detected to be in said first state.

9. The method of claim 8, wherein step (b) is accomplished immediately after said first state is detected in step (a).

10. The method of claim 9, further comprising the steps of:

(c) setting a data handling mode so as to either allow or not allow clearing of said receive buffer; and

(d) reading said data handling mode when said first state is detected in step (a);

wherein step (b) comprises clearing said receive buffer only when said data handling mode read in step (d) allows clearing of said receive buffer.

11. The method of claim 10, wherein step (c) is accomplished according to a specific control command from a host computer.

12. The method of claims 8, further comprising a step of:

(e) discarding data received from a host computer after said receive buffer was cleared in step (b) and until step (a) detects said second state.

13. The method of claim 10, wherein step (e) comprises discarding data only when said data handling mode read in step (d) allows discarding the data received from a host computer.

14. The method of claim 8, further comprising a step of:

(f) saving in said receive buffer data received from a host computer after said receive buffer was cleared in step (b) and until step (a) detects the second state.

15. The method of claim 8, further comprising a step of:

(g) clearing said receive buffer when said second state is detected in step (a) after said first state had been detected previously.

16. The method of claim 8, wherein step (b) comprises clearing said receive buffer and a print buffer.

17. The method of claim 15 wherein step (g) comprises clearing said receive buffer and a print buffer.

18. The method of claim 8 wherein said first state is an off-line state and said second state is an on-line state.

19. A host computer that sends data including control commands to a printer, comprising:

a data transmitter that sends print data accompanied by a printing completed command requesting said printer to notify said host computer when printing is completed;

a notification detector that awaits and detects a printing completed notification received from said printer in response to said printing completed command;

a state detector that awaits and detects an on-line state or off-line state notification from said printer; and

a print data resending unit that resends print data to said printer after receiving an on-line notification from said printer when said state detector detected an off-line notification from said printer while awaiting said printing completed notification.

20. A method of controlling a host computer for sending data including control commands to a printer controlled in accordance with the method as defined in claim 8, comprising the step of:

sending print data to the printer in conjunction with a printing completed command requesting notification when printing of said print data is completed;

awaiting a printed completed notification from the printer in response to said printing completed command; and

resending said print data to the printer after receiving an on-line notification from the printer when an off-line notification had been received from the printer while the printing completed notification was awaited.

21. A printer adapted to be connected to a host computer and to receive data including control commands from the host computer, comprising:

a receive buffer that temporarily stores received data;

a data interpreter that interprets the data in said receive buffer;

a controller responsive to said data interpreter that controls said printer;

a state detector that detects whether said printer is in a first state in which received data is not printed, or a second state in which received data is printed; and

a clearing unit that clears said receive buffer,

wherein said clearing unit is responsive to said state detector and clears said receive buffer when said printer is detected to be in said first state.

22. The printer of claim 21, further comprising:

5 a setting unit that sets a data handling mode that determines how data are handled when said printer is in said first state; and

a reading unit that reads said data handling mode when said printer is detected to be in said first state by said state detector;

wherein said clearing unit is adapted to clear said receive buffer only when said data handling mode is set to allow clearing of said receive buffer.

10 23. The printer of claim 21, further comprising a data discarding unit that discards data received from said host computer while said printer is in said first state.

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